# Commonwealth of Kentucky Environmental and Public Protection Cabinet Department for Environmental Protection Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

### AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: Blue Grass Army Depot

Mailing Address: 2091 Kingston Hwy, Richmond, KY 40475-5060

Source Name: Blue Grass Army Depot

Mailing Address: Same as above

Source Location: Route 120, Richmond, KY 40475

Permit Number: V-05-020 Source A. I. #: 2805

**Activity #: APE20040005** 

**Review Type:** Construction / Operating

Source ID #: 21-151-00013

**Regional Office:** Frankfort Regional Office

643 Teton Trail, STE B Frankfort, KY 40601-1758

(502) 564-3358

**County:** Madison

**Application** 

Complete Date: December 15, 2004

Issuance Date: July 6, 2005

**Revision Date:** 

**Expiration Date:** July 6, 2010

John S. Lyons, Director Division for Air Quality

Revised 12/09/02

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#### **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

EU01 (B01) Natural Gas Boiler

**Description:** Interim Use Boiler

Rated Capacity: 11.7 MMBTU/HR

Fuel: Natural gas

Date installed: January, 2005

Location: Building 571

#### **APPLICABLE REGULATIONS:**

401 KAR 59:015, New indirect heat exchanger, applicable to each indirect heat exchanger having a heat input capacity of more than 1,000,000 Btu per hour commenced on or after April 9, 1972.

Regulation 401 KAR 60:005, incorporating by reference Regulation 40 CFR 60, Subpart Dc, Standards of performance for small industrial-commercial-institutional steam generating units, for units less than or equal to 100 MMBTU/hour but greater than or equal to 10 MMBTU/hour commenced after June 9, 1989.

1. Operating Limitations: 11.7 MMBTU/HR

#### 2. Emission Limitations:

- A. i) Particulate emissions shall not exceed 0.38 lb/MMBTU
  - ii) Sulfur dioxide emissions shall not exceed 0.50 lb/MMBTU
  - iii) Visible emissions shall not exceed 20% opacity

#### **Compliance Demonstration Method:**

Compliance will be assured when the unit is burning natural gas.

- B. Source wide VOC emissions shall be less than or equal to 90.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (A).
- C. Source wide CO emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (D).
- D. Source wide  $NO_X$  emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (E).
- **3.** <u>Testing Requirements</u>: Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- **4.** <u>Specific Monitoring Requirements</u>: Monthly monitoring of the volume of natural gas burned shall be required.
- **5.** <u>Specific Record Keeping Requirements</u>: Monthly records of the volume of natural gas burned shall be maintained. See Section D.3, D.5 and D.6.
- **6. Specific Reporting Requirements:** See Section F.6.
- 7. Specific Control Equipment Operating Conditions: None

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Emission Units 2 - 6 Motor Pool Portable Compressors** 

**Description:** Five (5) Diesel fired air compressors with respective horsepowers of 228, 73.5, 73.5, 53 and 53

#### **APPLICABLE REGULATIONS:**

401 KAR 63:020, Potentially Hazardous Matter and Toxic Substance Emissions, applies to the potentially hazardous matter and toxic substance emissions from affected facilities.

#### 1. Operating Limitations:

None

- A. Source wide VOC emissions shall be less than or equal to 90.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (A).
- B. Source wide CO emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (D).
- C. Source wide  $NO_X$  emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (E).
- D. 401 KAR 63:020: See Section D, Compliance Demonstration Method (F), for emission limitations and compliance requirements.
- **3. Testing Requirements:** None
- 4. Specific Monitoring Requirements: None
- **5.** <u>Specific Record Keeping Requirements</u>: Monthly records of the volume of Diesel fuel burned shall be maintained. See Section D.3, D.5 and D.6.
- **6. Specific Reporting Requirements:** See Section F.6.
- 7. Specific Control Equipment Operating Conditions: None

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EU07 (E06) Wood Grinder

**<u>Description:</u>** Internal Combustion Engine (ICE) Grinder

Horsepower: 325

Rated Capacity: 2.28 MMBTU/HR

Fuel: Diesel

Date installed: 2004

#### **APPLICABLE REGULATIONS:**

401 KAR 63:020, Potentially Hazardous Matter and Toxic Substance Emissions, applies to the potentially hazardous matter and toxic substance emissions from affected facilities.

#### 1. **Operating Limitations:**

None

- A. Source wide VOC emissions shall be less than or equal to 90.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (A).
- B. Source wide CO emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (D).
- C. Source wide  $NO_X$  emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (E).
- D. 401 KAR 63:020: See Section D, Compliance Demonstration Method (F), for emission limitations and compliance requirements.
- 3. Testing Requirements: None
- 4. Specific Monitoring Requirements: None
- **5.** <u>Specific Record Keeping Requirements</u>: Monthly records of the volume of Diesel fuel burned shall be maintained. See Section D.3, D.5 and D.6.
- **6.** Specific Reporting Requirements: See Section F.6.
- 7. Specific Control Equipment Operating Conditions: None

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**EU08 (E07) Portable Air Compressor** 

**Description:** Air Compressor (F006)

Horsepower: 67.5

Rated Capacity: 0.47 MMBTU/HR

Fuel: Gasoline Date installed: 1982

#### **APPLICABLE REGULATIONS:**

None

#### 1. Operating Limitations:

None

- A. Source wide VOC emissions shall be less than or equal to 90.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (A).
- B. Source wide CO emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (D).
- C. Source wide  $NO_X$  emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (E).
- D. 401 KAR 63:020: See Section D, Compliance Demonstration Method (F), for emission limitations and compliance requirements.
- 3. Testing Requirements: None
- **4. Specific Monitoring Requirements:** None
- **5.** <u>Specific Record Keeping Requirements</u>: Monthly records of the volume of gasoline fuel burned shall be maintained. See Section D.3, D.5 and D.6.
- **6. Specific Reporting Requirements:** See Section F.6.
- 7. Specific Control Equipment Operating Conditions: None

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**EU09 (I01)** Multiple Chamber Incinerator

**Description:** Advanced Combustion Systems, Model CAI-500

Rated Capacity: 500 lb/hr

Type of Waste Burned: Industrial Solid Waste

Control Equipment: Secondary Burner Control Efficiency: 74.3% for PM/PM<sub>10</sub>

Date installed: April, 1981 Location: Building 252

#### **APPLICABLE REGULATIONS:**

401 KAR 59:020, New Incinerators, applicable to each incinerator commenced on or after June 6, 1979.

401 KAR 63:020, Potentially Hazardous Matter and Toxic Substance Emissions, applies to the potentially hazardous matter and toxic substance emissions from affected facilities.

#### 1. Operating Limitations:

- A. Operation of this unit is allowed when it is burning industrial solid waste, where industrial solid waste has the meaning given it in KRS 224.01-010 (31).
- B. The maximum quantity of waste burned shall not exceed 520 tons/year.

- A. Pursuant to 401 KAR 59:020, § 3(2)(a), gases emitted to the atmosphere shall not contain particulate matter in excess of 0.23 g/dscm (one-tenth (0.1) gr/dscf) corrected to twelve (12) percent carbon dioxide excluding the contribution of carbon dioxide from auxiliary fuel.
  - <u>Compliance Demonstration Method:</u> See Testing Requirements
- B. Pursuant to 401 KAR 59:020, § 3(1), Visible emission shall not exceed 20% opacity. Compliance Demonstration Method: See Testing Requirements
- C. Source wide VOC emissions shall be less than or equal to 90.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (A).
- D. Source wide CO emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (D).
- E. Source wide  $NO_X$  emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (E).
- F. 401 KAR 63:020: See Section D, Compliance Demonstration Method (F), for emission limitations and compliance requirements.

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 3. <u>Testing Requirements</u>:

- A. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4. Compliance with Emission Limitation (A) shall be demonstrated by following the test methods and procedures specified in 401 KAR 59:020, § 6 and § 7.
- B. Opacity of emissions shall be determined from the stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.
- C. Testing required by 401 KAR 59:020 § 6 and § 7 shall be conducted within 180 days of the issuance of this proposed permit. See Section G (a)(17).

#### 4. **Specific Monitoring Requirements:**

- A. A qualitative visual observation of the opacity of emissions shall be performed from the stack on a daily basis and a log of the observations maintained. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of the incinerator unit for all necessary repairs.
- B. Charge rates and hours of operation shall be monitored monthly.

#### 5. Specific Record Keeping Requirements:

- A. Monthly records of the tons of waste charged and the hours of operation shall be maintained. See Section D.3, D.5 and D.6.
- B. Records documenting the results of each opacity reading by EPA Reference Method 9 shall be maintained.
- C. Records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.

#### **6. Specific Reporting Requirements:** See Section F.6.

#### 7. Specific Control Equipment Operating Conditions:

- A. The incinerator unit shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- B. Records regarding the maintenance and operation of the incinerator unit shall be maintained.

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EU10 (I02) Contaminated Waste Processor

**Description:** Single Chamber Incinerator, Model CWP SU

Rated Capacity: 300 lb/hr

Type of Waste Burned: Industrial Solid Waste Control Equipment: Cyclone and Baghouse Control Efficiency: 97.5% for PM/PM<sub>10</sub>

Date installed: November, 1981

Location: Building 275

#### **APPLICABLE REGULATION:**

401 KAR 59:010, New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

401 KAR 59:020, New Incinerators, applicable to each incinerator commenced on or after June 6, 1979.

401 KAR 63:020, Potentially Hazardous Matter and Toxic Substance Emissions, applies to the potentially hazardous matter and toxic substance emissions from affected facilities.

#### 1. Operating Limitations:

- A. Operation of this unit is allowed when it is burning industrial solid waste, where industrial solid waste has the meaning given it in KRS 224.01-010 (31).
- B. The maximum quantity of waste burned shall not exceed 312 tons/year.

#### 2. Emission Limitations:

- A. Opacity and mass limits at the baghouse stack:
  - (i) Visible emissions shall not equal or exceed 20% opacity.

401 KAR 59:020, § 3(1).

(ii) Particulate emissions shall not equal or exceed 2.34 lbs/hour. 401 KAR 59:010, § 3(2).

See Specific Monitoring Requirements for compliance with A (i).

See Specific Control Equipment Operating Conditions for compliance with A (ii).

- B. Source wide VOC emissions shall be less than or equal to 90.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (A).
- C. Source wide CO emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (D).
- D. Source wide  $NO_X$  emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (E).
- E. 401 KAR 63:020: See Section D, Compliance Demonstration Method (F), for emission limitations and compliance requirements.

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- **3.** <u>Testing Requirements</u>: Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4.
  - A. Opacity of emissions shall be determined from the stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.
  - B. Particulate matter emissions from the bag house exhaust stack shall be determined by EPA Reference Method 5, within 180 days of the issuance of this permit. See Section G (a) (17).

#### 4. **Specific Monitoring Requirements:**

- A. A qualitative visual observation of the opacity of emissions shall be performed from the stack on a daily basis and a log of the observations maintained. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- B. Charge rates and hours of operation shall be monitored monthly.

#### **5. Specific Record Keeping Requirements:**

- A. Monthly records of the tons of waste charged and the hours of operation shall be maintained. See Section D.3, D.5 and D.6.
- B. Records documenting the results of each opacity reading by EPA Reference Method 9 shall be maintained.
- C. Records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.
- **6. Specific Reporting Requirements:** See Section F.6.

#### 7. Specific Control Equipment Operating Conditions:

- A. The cyclone and baghouse shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- B. Records regarding the maintenance and operation of the control equipment shall be maintained.

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# SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**EU11 (K01)** Aircraft Surface Coating

**Description:** Four applicators and a shot blast machine in a paint booth.

Cleanup solvent is VOC based. Control Equipment: Fabric Filter

Control Efficiency: 90% Date Constructed: 1992 Location: Building 232

#### APPLICABLE REGULATION:

401 KAR 59:010, New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

401 KAR 63:020, Potentially Hazardous Matter and Toxic Substance Emissions, applies to the potentially hazardous matter and toxic substance emissions from affected facilities.

- **1.** <u>Operating Limitations</u>: The following limits shall apply to assure compliance with <u>Emission Limitation C (ii) and D(ii)</u>.
  - A. Filters shall be in place at all times during shot blasting operations.
  - B. Filters shall be in place at all times during painting operations.
  - C. Filters shall be replaced when determined to be inefficient (as determined through visual inspection).

#### 2. Emission Limitations:

- A. Source wide VOC emissions shall be less than or equal to 90.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (A).
- B. HAP emissions shall not equal or exceed 9.0 tons per year of any single HAP or 22.5 tons per year of any combination of HAPs. These annual source wide limitations shall not be exceeded during any consecutive twelve (12) month period for the entire source. See Section D, Compliance Demonstration Method (B) and (C).
- C. Opacity and mass limits apply during shot blasting operations:
  - (i) Visible emissions shall not equal or exceed 20% opacity. 401 KAR 59:010, § 3(1)(a).
  - (ii) Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

 $E = 3.59(P)^{(0.62)}$ 

Where.

E = Emission rate in pounds per hour.

P = Process input weight rate of plastic shot media.

401 KAR 59:010, § 3(2).

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **2.** Emission Limitations (Continued):

- D. Opacity and mass limits apply during painting operations:
  - (i) Visible emissions shall not equal or exceed 20% opacity. 401 KAR 59:010, § 3(1)(a).
  - (ii) Particulate emissions shall not equal or exceed 2.34 lbs/hour. 401 KAR 59:010, § 3(2).

See Specific Monitoring Requirements for compliance with C (i) and D (i).

See Specific Control Equipment Operating Conditions for compliance with C (ii) and D (ii).

E. 401 KAR 63:020: See Section D, Compliance Demonstration Method (F), for emission limitations and compliance requirements.

#### 3. <u>Testing Requirements</u>:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4.

#### 4. Specific Monitoring Requirements:

- A. A qualitative visual observation of the opacity of emissions shall be performed from the stack on a weekly basis and a log of the observations maintained when the unit is operating. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- B. The fabric filter pressure drop shall be monitored daily on days when the unit is operating.
- C. See Section D.8.

#### 5. Specific Recordkeeping Requirements:

- A. The permittee shall maintain monthly records of the purchase and usage of the paints and solvents or any VOC/HAP containing material. See Section D.3 and D.4.
- B. Records documenting the results of each opacity reading by EPA Reference Method 9 shall be maintained.
- C. Records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.
- D. The fabric filter pressure drop shall be recorded daily on days when the unit is operating.
- E. See Section D.8.

#### **6. Specific Reporting Requirements:**

The permittee shall submit an emissions calculations worksheet, which utilizes product specific emission factors. These worksheets shall be submitted as a hardcopy and shall serve as the method of determining compliance with the source wide limitations for HAP and VOC emissions. See Section F.6.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 7. Specific Control Equipment Operating Conditions:

Exhaust filters shall be in place at all times when the booth is operating and shall be changed as needed to comply with the emission limitations.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**EU12 (K02) Munitions Surface Coating** 

**Description:** Two paint booths (K02-550-1, K02-550-2),

one paint gun per booth.

Cleanup Solvent is water based.

Control Equipment: Dry Filter Media,

Primary and Secondary Filters

Control Efficiency: 90%

Proposed Construction Date: 2005

Location: Building 550

#### APPLICABLE REGULATION:

401 KAR 59:010, New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

- **1.** <u>Operating Limitations</u>: The following limits shall apply to assure compliance with <u>Emission</u> Limitation C (ii).
  - A. Filters shall be in place at all times when a machine is applying paint.
  - B. Filters shall be replaced when determined to be inefficient (as determined through visual inspection).

#### **2.** Emission Limitations:

- A. Source wide VOC emissions shall be less than or equal to 90.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (A).
- B. HAP emissions shall not equal or exceed 9.0 tons per year of any single HAP or 22.5 tons per year of any combination of HAPs. These annual source wide limitations shall not be exceeded during any consecutive twelve (12) month period for the entire source. See Section D, Compliance Demonstration Method (B).
- C. Opacity and mass limits apply during painting operations:
  - (i) Visible emissions shall not equal or exceed 20% opacity. 401 KAR 59:010, § 3(1)(a).
  - (ii) Particulate emissions shall not equal or exceed 2.34 lbs/hour. 401 KAR 59:010, § 3(2).

See Specific Monitoring Requirements for compliance with C (i).

See Specific Control Equipment Operating Conditions for compliance with C (ii).

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 3. <u>Testing Requirements</u>:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4.

#### 4. Specific Monitoring Requirements:

- A. A qualitative visual observation of the opacity of emissions shall be performed from the stack on a weekly basis and a log of the observations maintained when the unit is operating. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- B. The filter pressure drop for each booth shall be monitored daily on days when the unit is operating.
- C. See Section D.8.

#### 5. Specific Recordkeeping Requirements:

- A. The permittee shall maintain monthly records of the purchase and usage of the paints and solvents or any VOC/HAP containing material. See Section D.3 and D.4.
- B. Records documenting the results of each opacity reading by EPA Reference Method 9 shall be maintained.
- C. Records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.
- D. The filter pressure drop for each booth shall be recorded daily on days when the unit is operating.
- E. See Section D.8.

#### 6. Specific Reporting Requirements:

The permittee shall submit an emissions calculations worksheet, which utilizes product specific emission factors. These worksheets shall be submitted as a hardcopy and shall serve as the method of determining compliance with the source wide limitations for HAP and VOC emissions. See Section F.6.

#### 7. Specific Control Equipment Operating Conditions:

Exhaust filters shall be in place at all times when the booth is operating and shall be changed as needed to comply with the emission limitations.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**EU13 (K03) Munitions Surface Coating** 

**Description:** Four paint booths (K03-555-1, K03-555-2, K03-555-3, one

paint gun per booth) & (K03-555-4 & 5, one booth with two

paint guns)

Cleanup Solvent is water and oil based. Control Equipment: Dry Filter Media,

Primary and Secondary Filters

Control Efficiency: 90%

Construction Date: Prior to 1980

Location: Building 555

#### **APPLICABLE REGULATION:**

401 KAR 59:010, New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

401 KAR 63:020, Potentially Hazardous Matter and Toxic Substance Emissions, applies to the potentially hazardous matter and toxic substance emissions from affected facilities.

- **1.** <u>Operating Limitations</u>: The following limits shall apply to assure compliance with <u>Emission</u> Limitation C (ii).
  - A. Filters shall be in place at all times when a machine is applying paint.
  - B. Filters shall be replaced when determined to be inefficient (as determined through visual inspection).

#### 2. Emission Limitations:

- A. Source wide VOC emissions shall be less than or equal to 90.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (A).
- B. HAP emissions shall not equal or exceed 9.0 tons per year of any single HAP or 22.5 tons per year of any combination of HAPs. These annual source wide limitations shall not be exceeded during any consecutive twelve (12) month period for the entire source. See Section D, Compliance Demonstration Method (B).
- C. Opacity and mass limits apply during painting operations:
  - (i) Visible emissions shall not equal or exceed 20% opacity.

401 KAR 59:010, § 3(1)(a).

(ii) Particulate emissions shall not equal or exceed 2.34 lbs/hour. 401 KAR 59:010, § 3(2).

See Specific Monitoring Requirements for compliance with C (i).

See Specific Control Equipment Operating Conditions for compliance with C (ii).

D. 401 KAR 63:020: See Section D, Compliance Demonstration Method (F), for emission limitations and compliance requirements.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 3. Testing Requirements:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4.

#### 4. Specific Monitoring Requirements:

- A. A qualitative visual observation of the opacity of emissions shall be performed from the stack on a weekly basis and a log of the observations maintained when the unit is operating. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- B. The filters for booths 555-1, 555-2 and 555-3 shall be visually inspected for solids build-up on days when the unit is operating.
- C. The filter pressure drop for booth 555-4 & 5 shall be monitored daily on days when the unit is operating.
- D. See Section D.8.

#### 5. Specific Recordkeeping Requirements:

- A. The permittee shall maintain monthly records of the purchase and usage of the paints and solvents or any VOC/HAP containing material. See Section D.3 and D.4.
- B. Records documenting the results of each opacity reading by EPA Reference Method 9 shall be maintained.
- C. Records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.
- D. The visual inspection of 555-1, 555-2 and 555-3 booth filters shall recorded daily on days when the unit is operating.
- E. The filter pressure drop for booth 555-4 & 5 shall be recorded daily on days when the unit is operating.
- F. See Section D.8.

#### **6. Specific Reporting Requirements:**

The permittee shall submit an emissions calculations worksheet, which utilizes product specific emission factors. These worksheets shall be submitted as a hardcopy and shall serve as the method of determining compliance with the source wide limitations for HAP and VOC emissions. See Section F.6.

#### 7. Specific Control Equipment Operating Conditions:

Exhaust filters shall be in place at all times when the booth is operating and shall be changed as needed to comply with the emission limitations.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**EU14 (K04) Munitions Surface Coating** 

**Description:** Four paint booths (K04-562-1, K04-562-2, K04-562-3, K04-

562-4), one paint gun per booth. Cleanup Solvent is water based. Control Equipment: Dry Filter Media,

Primary and Secondary Filters Control Efficiency: 90% Construction Date: 1970 Location: Building 562

#### **APPLICABLE REGULATION:**

401 KAR 59:010, New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

401 KAR 63:020, Potentially Hazardous Matter and Toxic Substance Emissions, applies to the potentially hazardous matter and toxic substance emissions from affected facilities.

- **1.** <u>Operating Limitations</u>: The following limits shall apply to assure compliance with <u>Emission</u> Limitation C (ii).
  - A. Filters shall be in place at all times when a machine is applying paint.
  - B. Filters shall be replaced when determined to be inefficient (as determined through visual inspection).

#### 2. Emission Limitations:

- A. Source wide VOC emissions shall be less than or equal to 90.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (A).
- B. HAP emissions shall not equal or exceed 9.0 tons per year of any single HAP or 22.5 tons per year of any combination of HAPs. These annual source wide limitations shall not be exceeded during any consecutive twelve (12) month period for the entire source. See Section D, Compliance Demonstration Method (B).
- C. Opacity and mass limits apply during painting operations:
  - (i) Visible emissions shall not equal or exceed 20% opacity.
    - 401 KAR 59:010, § 3(1)(a).
  - (ii) Particulate emissions shall not equal or exceed 2.34 lbs/hour. 401 KAR 59:010, § 3(2).

See Specific Monitoring Requirements for compliance with C (i).

See Specific Control Equipment Operating Conditions for compliance with C (ii).

D. 401 KAR 63:020: See Section D, Compliance Demonstration Method (F), for emission limitations and compliance requirements.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 3. <u>Testing Requirements</u>:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4.

#### 4. Specific Monitoring Requirements:

- A. A qualitative visual observation of the opacity of emissions shall be performed from the stack on a weekly basis and a log of the observations maintained when the unit is operating. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- B. The filters shall be visually inspected for solids build-up on days when the units are operating.
- C. See Section D.8.

#### 5. Specific Recordkeeping Requirements:

- A. The permittee shall maintain monthly records of the purchase and usage of the paints and solvents or any VOC/HAP containing material. See Section D.3 and D.4.
- B. Records documenting the results of each opacity reading by EPA Reference Method 9 shall be maintained.
- C. Records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.
- D. The visual inspection of the booth filters shall be recorded daily on days when the units are operating.
- E. See Section D.8.

#### 6. Specific Reporting Requirements:

The permittee shall submit an emissions calculations worksheet, which utilizes product specific emission factors. These worksheets shall be submitted as a hardcopy and shall serve as the method of determining compliance with the source wide limitations for HAP and VOC emissions. See Section F.6.

#### 7. Specific Control Equipment Operating Conditions:

Exhaust filters shall be in place at all times when the booth is operating and shall be changed as needed to comply with the emission limitations.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**EU15 (K05) Munitions Surface Coating** 

**Description:** Three paint booths (K05-1180-1A, K05-1180-1B, K05-1180-2

and K05-1180-3), two paint guns in booth 1, one paint gun in

booth 2 and one paint gun in booth 3. Cleanup Solvent is VOC based. Control Equipment: Dry Media, Primary and Secondary Filters Control Efficiency: 90%

Proposed Construction Date: 2005

Location: Building 1180

#### **APPLICABLE REGULATION:**

401 KAR 59:010, New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

401 KAR 63:020, Potentially Hazardous Matter and Toxic Substance Emissions, applies to the potentially hazardous matter and toxic substance emissions from affected facilities.

- **1.** <u>Operating Limitations</u>: The following limits shall apply to assure compliance with <u>Emission</u> Limitation C (ii).
  - A. Filters shall be in place at all times when a machine is applying paint.
  - B. Filters shall be replaced when determined to be inefficient (as determined through visual inspection).

#### 2. Emission Limitations:

- A. Source wide VOC emissions shall be less than or equal to 90.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (A).
- B. HAP emissions shall not equal or exceed 9.0 tons per year of any single HAP or 22.5 tons per year of any combination of HAPs. These annual source wide limitations shall not be exceeded during any consecutive twelve (12) month period for the entire source.
  - See Section D, Compliance Demonstration Method (B).
- C. Opacity and mass limits apply during painting operations:
  - (i) Visible emissions shall not equal or exceed 20% opacity.
    - 401 KAR 59:010, § 3(1)(a).
  - (ii) Particulate emissions shall not equal or exceed 2.34 lbs/hour. 401 KAR 59:010, § 3(2).

See Specific Monitoring Requirements for compliance with C (i).

See Specific Control Equipment Operating Conditions for compliance with C (ii).

D. 401 KAR 63:020: See Section D, Compliance Demonstration Method (F), for emission limitations and compliance requirements.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 3. <u>Testing Requirements</u>:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4.

#### 4. Specific Monitoring Requirements:

- A. A qualitative visual observation of the opacity of emissions shall be performed from the stack on a weekly basis and a log of the observations maintained when the unit is operating. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- B. The filter pressure drop shall be monitored daily on days when the units are operating.
- C. See Section D.8.

#### 5. Specific Recordkeeping Requirements:

- A. The permittee shall maintain monthly records of the purchase and usage of the paints and solvents or any VOC/HAP containing material. See Section D.3 and D.4.
- B. Records documenting the results of each opacity reading by EPA Reference Method 9 shall be maintained.
- C. Records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.
- D. The filter pressure drop shall be recorded daily on days when the units are operating.
- E. See Section D.8.

#### **6. Specific Reporting Requirements:**

The permittee shall submit an emissions calculations worksheet, which utilizes product specific emission factors. These worksheets shall be submitted as a hardcopy and shall serve as the method of determining compliance with the source wide limitations for HAP and VOC emissions. See Section F.6.

#### 7. Specific Control Equipment Operating Conditions:

Exhaust filters shall be in place at all times when the booth is operating and shall be changed as needed to comply with the emission limitations.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **EU16 (P18) Detonation Chamber:**

Equipment includes: blast/detonation chamber and expansion chamber

equipped with a cartridge filter unit.

Control Efficiency: 99.9% Date Constructed: May, 1999 Location: Building 280

#### Maximum Material Process Rates:

Water: 300 pounds/hour Metal: 6000 pounds/hour Explosive: 300 Pounds/hour

#### **APPLICABLE REGULATION:**

401 KAR 59:010, New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

401 KAR 63:020, Potentially Hazardous Matter and Toxic Substance Emissions, applies to the potentially hazardous matter and toxic substance emissions from affected facilities.

#### 1. Operating Limitations:

The usage rate of raw materials used in all affected facilities shall be limited so that the emission limitations set forth in item 2, below, are not exceeded.

#### 2. Emission Limitations:

A. Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

 $E = 3.59 \text{ x } (P)^{(0.62)}$ 

Where,

E = Emission rate in pounds per hour.

P = Process input weight rate of explosive into the detonation chamber in tons per hour.

401 KAR 59:010, § 3(2).

B. Visible emissions shall not equal or exceed 20% opacity.

401 KAR 59:010, § 3(1)(a).

Compliance Demonstration Method: See Monitoring and Record Keeping Requirements.

C. Source wide VOC emissions shall be less than or equal to 90.0 tons during any twelve (12) consecutive month period.

See Section D, Compliance Demonstration Method (A).

D. Source wide CO emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.

See Section D, Compliance Demonstration Method (D).

E. Source wide  $NO_X$  emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.

See Section D, Compliance Demonstration Method (E).

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 2. <u>Emission Limitations (Continued)</u>:

F. 401 KAR 63:020: See Section D, Compliance Demonstration Method (F), for emission limitations and compliance requirements.

#### 3. Testing Requirements:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4. Opacity of emissions from the stack shall be determined by EPA Reference Method 9 annually, or more frequently if requested by the Division.

#### 4. Specific Monitoring Requirements:

- A. A qualitative visual observation of the opacity of emissions from the stack shall be performed on a weekly basis and a log of observations maintained when the unit is operating. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- B. The processing rates and hours of operation shall be monitored on a daily basis on days when the unit is operating.
- C. The cartridge filter house pressure drop shall be monitored on a daily basis on days when the unit is operating.
- D. See Section D.8.

#### **5. Specific Record Keeping Requirements:**

- A. Records documenting the results of each opacity reading by EPA Reference Method 9 shall be maintained.
- B. The processing rates and hours of operation shall be recorded on a daily basis on days when the unit is operating. See Section D.3, D.5 and D.6.
- C. Records documenting the results of each opacity reading by EPA Reference Method 9 shall be maintained.
- D. Records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.
- E. The cartridge filter house pressured drop shall be recorded on a daily basis on days when the unit is operating.
- F. See Section D.8.

#### **6. Specific Reporting Requirements:** See Section F.6.

#### 7. Specific Control Equipment Operating Conditions:

- A. The filter unit shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- B. Records regarding the maintenance and operation of the control equipment shall be maintained.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**EU17 (P01)** Shot Blasting of Munitions

Process Equipment: Wheelabrator Control Equipment: Bag House Control Efficiency: 99.9% Date Installed: 1960

Location: Building 1180

#### **APPLICABLE REGULATION:**

401 KAR 61:020, Existing process operations.

**1.** <u>Operating Limitations</u>: The usage rate of raw materials used in all affected facilities shall be limited so that the emission limitations set forth in item 2, below, are not exceeded.

#### 2. Emission Limitations:

Opacity and mass limits apply during shot blasting operations:

- (i) Visible emissions shall not equal or exceed 40% opacity.
  - 401 KAR 61:020, § 3(1)(a).
- (ii) Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

 $E = [55 \text{ x } (P)^{(0.11)}] - 40$ 

Where,

E = Emission rate in pounds per hour.

P = Process input weight rate of steel shot media.

401 KAR 61:020, § 3(2).

Compliance Demonstration Method: See Monitoring and Record Keeping Requirements

**3.** <u>Testing Requirements</u>: Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 61:005, § 2(2) and 50:045, § 4. In addition, once a calendar year, EPA Reference Method 9 or equivalent reading shall be performed.

#### 4. **Specific Monitoring Requirements:**

- A. Daily monitoring of bag house pressure drop shall be conducted on days when the unit is in operation.
- B. See Section D.8.

#### 5. Specific Record Keeping Requirements:

- A. Records documenting the results of each opacity reading by EPA Reference Method 9 shall be maintained.
- B. Records documenting the results of any required inspection and repair, as a result of a recorded opacity over 40%.
- C. The permittee shall record the bag house pressure drop daily on days when the unit is operating.
- D. See Section D.8.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**6. Specific Reporting Requirements:** None

#### 7. Specific Control Equipment Operating Conditions:

Bag houses shall be maintained and operated in accordance with manufacturer's recommendations.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**EU18 (P02)** Shot Blasting of Munitions

Process Equipment: Wheelabrator Control Equipment: Bag House Control Efficiency: 99.9%

Date Installed: After July 2, 1975

Location: Building 562

#### **APPLICABLE REGULATION:**

401 KAR 59:010, New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

**1.** <u>Operating Limitations</u>: The usage rate of raw materials used in all affected facilities shall be limited so that the emission limitations set forth in item 2, below, are not exceeded.

#### 2. Emission Limitations:

Opacity and mass limits apply during shot blasting operations:

- (i) Visible emissions shall not equal or exceed 20% opacity.
  - 401 KAR 59:010, § 3(1)(a).
- (ii) Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

 $E = 17.31(P)^{(0.16)}$ 

Where,

E = Emission rate in pounds per hour.

P = Process input weight rate of steel shot media.

401 KAR 59:010, § 3(2).

Compliance Demonstration Method: See Monitoring and Record Keeping Requirements

**Testing Requirements:** Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4. In addition, once a calendar year, EPA Reference Method 9 or equivalent reading shall be performed.

#### 4. Specific Monitoring Requirements:

- A. A daily visual inspection of the bag house shall be conducted on days when the unit is in operation.
- B. See Section D.8.

#### 5. Specific Record Keeping Requirements:

- A. Records documenting the results of each opacity reading by EPA Reference Method 9 shall be maintained.
- B. Records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.
- C. The bag house visual inspection shall be recorded daily on days when the unit is operating.
- D. See Section D.8.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**6. Specific Reporting Requirements:** None

#### 7. Specific Control Equipment Operating Conditions:

Bag houses shall be maintained and operated in accordance with manufacturer's recommendations.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**EU19 (P03)** Shot Blasting of Munitions

Process Equipment: Disa Goff, Inc. Model BC4-20

Control Equipment: Cartridge Collector

Control Efficiency: 99.9% Date Installed: 2004 Location: Building 550

#### **APPLICABLE REGULATION:**

401 KAR 59:010, New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

**1.** <u>Operating Limitations</u>: The usage rate of raw materials used in all affected facilities shall be limited so that the emission limitations set forth in item 2, below, are not exceeded.

#### 2. Emission Limitations:

Opacity and mass limits apply during shot blasting operations:

- (i) Visible emissions shall not equal or exceed 20% opacity.
  - 401 KAR 59:010, § 3(1)(a).
- (ii) Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

 $E = 17.31(P)^{(0.16)}$ 

Where.

E = Emission rate in pounds per hour.

P = Process input weight rate of steel shot media.

401 KAR 59:010, § 3(2).

Compliance Demonstration Method: See Monitoring and Record Keeping Requirements

**Testing Requirements:** Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4. In addition, once a calendar year, EPA Reference Method 9 or equivalent reading shall be performed.

#### 4. Specific Monitoring Requirements:

- A. Daily monitoring of cartridge filter house pressure drop shall be conducted on days when the unit is in operation.
- B. See Section D.8.

#### 5. Specific Record Keeping Requirements:

- A. Records documenting the results of each opacity reading by EPA Reference Method 9 shall be maintained.
- B. Records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.
- C. The cartridge filter house pressure drop shall be recorded daily on days when the unit is operating.
- D. See Section D.8.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**6. Specific Reporting Requirements:** None

#### 7. Specific Control Equipment Operating Conditions:

Filter houses shall be maintained and operated in accordance with manufacturer's recommendations.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**EU20 (P04)** Shot Blasting of Munitions

Process Equipment: APE 1029 Jet Wheelblast Model PB-18

Control Equipment: Bag House Control Efficiency: 99.9% Date Installed: 1990

Location: Building 555

#### **APPLICABLE REGULATION:**

401 KAR 59:010, New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

**1.** <u>Operating Limitations</u>: The usage rate of raw materials used in all affected facilities shall be limited so that the emission limitations set forth in item 2, below, are not exceeded.

#### 2. Emission Limitations:

Opacity and mass limits apply during shot blasting operations:

- (i) Visible emissions shall not equal or exceed 20% opacity.
  - 401 KAR 59:010, § 3(1)(a).
- (ii) Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

 $E = 17.31(P)^{(0.16)}$ 

Where.

E = Emission rate in pounds per hour.

P = Process input weight rate of steel shot media.

401 KAR 59:010, § 3(2).

Compliance Demonstration Method: See Monitoring and Record Keeping Requirements

**Testing Requirements:** Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4. In addition, once a calendar year, EPA Reference Method 9 or equivalent reading shall be performed.

#### 4. Specific Monitoring Requirements:

- A. Daily visual inspection of the bag house shall be conducted on days when the unit is in operation.
- B. See Section D.8.

#### 5. Specific Record Keeping Requirements:

- A. Records documenting the results of each opacity reading by EPA Reference Method 9 shall be maintained.
- B. Records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.
- C. The bag house visual inspection shall be recorded daily on days when the unit is operating.
- D. See Section D.8.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**6. Specific Reporting Requirements:** None

#### 7. Specific Control Equipment Operating Conditions:

Bag houses shall be maintained and operated in accordance with manufacturer's recommendations.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EU21 Natural Gas Fired Indirect Heat Exchangers ranging between >1 and <5 MMBTU/hr x 17 units

Date Constructed: Approximately 1979

ID	Source Type	Source Location	Description &	Generally
			Rated Capacity	Applicable Regulation
1	Boiler	Building 556	4.24MMBTU/hr NG Boiler	401 KAR 59:015
2	Boiler	Building 214	4.2MMBTU/hr NG Boiler	401 KAR 59:015
3	Boiler	Building 1181	5.24MMBTU/hr NG Boiler	401 KAR 59:015
4	Boiler	Building S-9	3.1MMBTU/hr NG Boiler	401 KAR 59:015
5	Boiler	Building S-11	3.1MMBTU/hr NG Boiler	401 KAR 59:015
6	Boiler	Building 551	2.6MMBTU/hr NG Boiler	401 KAR 59:015
7	Boiler	Building S-17	2.5MMBTU/hr NG Boiler	401 KAR 59:015
8	Boiler	Building 1169	2.34MMBTU/hr NG Boiler	401 KAR 59:015
9	Boiler	Building 220	2.2MMBTU/hr NG Boiler	401 KAR 59:015
10	Boiler	Building 1661	2.05MMBTU/hr NG Boiler	401 KAR 59:015
11	Boiler	Building 1137	1.9MMBTU/hr NG Boiler	401 KAR 59:015
12	Boiler	Building 562	1.7MMBTU/hr NG Boiler	401 KAR 59:015
13	Boiler	Building 560	1.7MMBTU/hr NG Boiler	401 KAR 59:015
14	Boiler	Building 215	1.7MMBTU/hr NG Boiler	401 KAR 59:015
15	Boiler	Building 215	1.7MMBTU/hr NG Boiler	401 KAR 59:015
16	Boiler	Building S-15	1.36MMBTU/hr NG Boiler	401 KAR 59:015
17	Boiler	Building 1170	1.36MMBTU/hr NG Boiler	401 KAR 59:015

#### **APPLICABLE REGULATIONS:**

Regulation 401 KAR 59:015, New Indirect Heat Exchangers applicable to an emission unit with a capacity less than 250 MMBTU per hour and commenced on or after April 9, 1972.

1. Operating Limitations: Total Heat Input for Units 1 − 17: 42.99 MMBTU/HR Compliance Demonstration Method: The unit shall be deemed to be in compliance when the unit is burning natural gas.

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 2. Emission Limitations:

- A. i) Particulate emissions shall not exceed 0.40 lb/MMBTU
  - ii) Sulfur dioxide emissions shall not exceed 1.65 lb/MMBTU
  - iii) Visible emissions shall not exceed 20% opacity

#### **Compliance Demonstration Method:**

Compliance is assured when the units are burning natural gas.

- B. Source wide VOC emissions shall be less than or equal to 90.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (A).
- C. Source wide CO emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (D).
- D. Source wide  $NO_X$  emissions shall be less than or equal to 225.0 tons during any twelve (12) consecutive month period.
  - See Section D, Compliance Demonstration Method (E).
- **3.** <u>Testing Requirements</u>: Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4.
- **4.** <u>Specific Monitoring Requirements</u>: Monthly monitoring of the volume of natural gas burned shall be required.
- **5.** <u>Specific Record Keeping Requirements</u>: The permittee shall keep monthly records of the volume of natural gas burned. See Section D.3, D.5 and D.6.
- **6. Specific Reporting Requirements:** See Section F.6.
- 7. Specific Control Equipment Operating Conditions: None

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# SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**EU22** Waste Military Munitions Treatment by Open Detonation

#### **APPLICABLE REGULATIONS:**

401 KAR 63:010, Fugitive Emissions

401 KAR 63:020, Potentially Hazardous Matter and Toxic Substance Emissions

#### 1. **Operating Limitations**:

- A. 401 KAR 63:010, § 3(2), no person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.
- B. 401 KAR 63:020, § 3, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.
- **2.** <u>Emission Limitations</u>: 401 KAR 63:020: See Section D, Compliance Demonstration Method (F), for emission limitations and compliance requirements.
- **3.** <u>Testing Requirements</u>: None
- **4.** <u>Specific Monitoring Requirements</u>: The net explosive weight of waste military munitions processed by open detonation shall be monitored. Net explosive weight is defined as the weight of explosive or propellant fill that is wholly contained in metal (i.e., brass aluminum, or steel), non-metallic (e.g., plastic or fiberglass) or composite casings.
- **5.** <u>Specific Record Keeping Requirements</u>: Annual records shall be maintained of the net explosive weight of waste military munitions processed by open detonation.
- **6. Specific Reporting Requirements:** None
- 7. Specific Control Equipment Operating Conditions: None
- **8.** Alternate Operating Scenarios: None

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### **SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, § 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary. See Section D, Compliance Demonstration Method (A), Compliance Demonstration Method (D) and Compliance Demonstration Method (E).

ID	Source Type	Source Location	Description & Rated Capacity	Generally Applicable Regulation
1	Boiler	Building 280	0.7MMBTU/hr Propane Boiler	None
2	Boiler	Building 1168	0.79 MMBTU/hr NG Boiler	None
3	Boiler	Building 228	0.79 MMBTU/hr NG Boiler	None
4	Boiler	Building 908	0.79 MMBTU/hr NG Boiler	None
5	Boiler	Building 1	0.5 MMBTU/hr NG Boiler	None
6	Boiler	Building S-2	0.4 MMBTU/hr NG Boiler	None
7	Boiler	Building 218	0.35 MMBTU/hr NG Boiler	None
8	Boiler	Building 261	0.34 MMBTU/hr NG Boiler	None
9	Boiler	34 Reserve	0.34 MMBTU/hr NG Boiler	None
10	Boiler	Building 1146	0.8 MMBTU/hr NG Boiler	None
11	Boiler	Building 162	0.25 MMBTU/hr NG Boiler	None

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ID	Sour	ce Type	Source Location	Description & Rated Capacity	Generally Applicable Regulation
12	Heater		Building 850	0.75 MMBTU/hr NG Heater	None
13	Heaters		Building 208	(18) 0.4 MMBTU/hr NG Heaters	None
14	Heaters		Building 209	(18) 0.4 MMBTU/hr NG Heaters	None
15	Heaters		Building 210	(18) 0.4 MMBTU/hr NG Heaters	None
16	Heaters		Building 211	(18) 0.4 MMBTU/hr NG Heaters	None
17	Heaters		Building 232	(4) 0.4 MMBTU/hr NG Heaters	None
18	Heaters		Building 232	(2) 4.147 MMBTU/hr NG Heaters	None
19	Heaters		Building 232	(6) 0.1 MMBTU/hr NG Heaters	None
20	Heater		Building 233	(1) 0.4 MMBTU/hr NG Heater	None
21	Heaters		Building 229	(8) 0.1 MMBTU/hr NG Heaters	None
22	Heaters		Building S-285	(4) 0.1 MMBTU/hr NG Heaters	None
23	Heaters		Building 212	(2) 0.075 MMBTU/hr NG Heaters	None
24	Internal Engine	Combustion	Access Control Building	ACS Generator, Diesel, 221 hp, Emg. Gen.	401 KAR 63:020*
25	Internal Engine	Combustion	BGCA Motor Pool	CA 092, Decon M12A1, Diesel 37.5 hp, Emg. Gen.	401 KAR 63:020*
26	Internal Engine	Combustion	BGCA Motor Pool	CA 094, Decon M12A1, Diesel, 37.5hp, Emg. Gen.	401 KAR 63:020*
27	Internal Engine	Combustion	Building 219	Kohler Emg. Gen., Diesel 107.2 hp	401 KAR 63:020*
28	Internal Engine	Combustion	Building 229	GTED aviation ground power, 83360A-1003 Diesel 40.2 hp	401 KAR 63:020*
29	Internal Engine	Combustion	Building 229	GTED aviation ground power, 83360A-1010 Diesel 40.2 hp	401 KAR 63:020*
30	Internal Engine	Combustion	Building 230	DL-230, Onan 75-ODYC- 15R/23117K, Diesel, 100.5 hp Emg. Gen.	401 KAR 63:020*
31	Internal Engine	Combustion	Building T-250	Emg. Gen. #1 Cummins 6BTA, Diesel 207.7 hp	401 KAR 63:020*
32	Internal Engine	Combustion	Building T-250	Emg. Gen. #2 Cummins 6BTA, Diesel 207.7 hp	401 KAR 63:020*
33	Internal Engine	Combustion	Area F Hut	Olympian G60F3, NG Emg. Gen. 80.4 hp	None

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ID	Source Type	Source Location	Description & Rated Capacity	Generally Applicable Regulation
34	Internal Combustion Engine	Building 1660	Catepiller, G3406- 240KW, NG Emg. Gen. 321.6 hp	None
35	Internal Combustion Engine	Building 1661	Olympian, G80F3, NG Emg. Gen. 100.5 hp	None
36	Internal Combustion Engine	Building 212 Hut	Olympian, G10U3S NG Emg. Gen. 13.4 hp	None
37	Internal Combustion Engine	Building 218	Olympian, G100F1, NG Emg. Gen. 134 hp	None
38	Internal Combustion Engine	Building 219	Olympian, G60F1, NG Emg. Gen. 107.2 hp	None
39	Internal Combustion Engine	Building S-18	UBS, NG, 80.4 hp Emg. Gen.	None
40	Internal Combustion Engine	Building S-287	Olympian G75F35, NG 100.5 hp Emg. Gen.	None
41	Internal Combustion Engine	Building S-3	Olympian G12U3, NG, 16.1 hp, Emg. Gen.	None
42	Internal Combustion Engine	EOC S-18	Generac Model 9404761, NG, 23.0 hp Emg. Gen.	None
43	Internal Combustion Engine	Hut 75 at light 8	Olympian G10U3S, NG 13.4 hp, Emg. Gen.	None
44	Internal Combustion Engine	North Area Pump Station	Catepiller G3406NA-201 hp, NG, Emg. Gen.	None
45	Internal Combustion Engine	Route 12 Pump Station	Catepillar G30F3-40.2 hp NG, Emg. Gen	None
46	Internal Combustion Engine	Route 2 Pump Station	Catepillar G30F3-40.2 hp NG, Emg. Gen.	None
47	Internal Combustion Engine	Building 218	Olympian G1000F1, 134 hp NG, Emg. Gen.	None
48	Internal Combustion Engine	Building 154	Olympian G100F1, 134 hp NG, Emg. Gen.	None
49	Internal Combustion Engine	Building S-18	Olympian G100F3, 134 hp NG, Emg. Gen.	None
50	Internal Combustion Engine	Truck Gate	Olympian G60F1, 80.5 hp NG, Emg. Gen.	None
51	Internal Combustion Engine	Treaty [Bldg. S-56]	Olympian G100F3, 134 hp NG Emg. Gen.	None
52	Internal Combustion Engine	Fire Station [Bldg. S-12]	Olympian G20F3, 26.8 hp NG Emg. Gen.	None
53	Internal Combustion Engine	LP 54 Hut	Olympian G10U3S, NG, 13.4 hp, Emg. Gen.	None
54	Internal Combustion Engine	Building 49	60.3 hp Emg. Gen.	None
55	Internal Combustion Engine	Mobile Op. Trailer	Olympian G10U3S 13.4 hp Propane Emg. Gen.	None
56	Internal Combustion Engine	Lake Vega	Kohler Model 80RZ282, Propane, 107.2 hp Emg. Gen.	None

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ID	Source Type	Source Location	Description & Rated Capacity	Generally Applicable Regulation
57	Internal Combustion Engine	BGCA Motor Pool	CA14 Filter Unit, Trailer Mounted, w/generator, Diesel, 24.12 hp	401 KAR 63:020*
58	Internal Combustion Engine	BGCA Motor Pool	CA17 Filter Unit, Trailer mounted, w/generator, Diesel, 24.12 hp	401 KAR 63:020*
59	Internal Combustion Engine	BGCA Motor Pool	CA13 Filter Unit, Trailer Mounted, w/generator, Diesel, 21.44 hp	401 KAR 63:020*
60	Internal Combustion Engine	BGCA Motor Pool	CA16 Filter Unit, Trailer mounted, w/generator, Diesel, 18.09 hp	401 KAR 63:020*
61	Internal Combustion Engine	BGAD Motor Pool, LP-1	A115, Lightset, Diesel, 8.0 hp	401 KAR 63:020*
62	Internal Combustion Engine	BGAD Motor Pool, LP-1	A116, Light Source, Kubota D905B, Diesel 8.0 hp	401 KAR 63:020*
63	Internal Combustion Engine	BGAD Motor Pool, LP-1	A117, Light Source, Kubota D905B, Diesel 8.0 hp	401 KAR 63:020*
64	Internal Combustion Engine	BGAD Motor Pool	CA 074, Portable Lights, Ing Rand L6-4MH, Diesel 8.04 hp	401 KAR 63:020*
65	Internal Combustion Engine	BGCA Motor Pool	CA 075, Portable Lights, Ing Rand L6-4MH Diesel 8.0 hp	401 KAR 63:020*
66	Internal Combustion Engine	BGCA Motor Pool	CA 076, Portable Lights, Ing Rand L6-4MH, Diesel 8.0 hp	401 KAR 63:020*
67	Internal Combustion Engine	Garage near S-7	A118, Lightset, Diesel, 8.0 hp	401 KAR 63:020*
68	Internal Combustion Engine	Garage near S-7	CA 071, Generator, Diesel, 16.08 hp	401 KAR 63:020*
69	Internal Combustion Engine	Building 59	CA 072, Generator, Diesel, 13.4 hp	401 KAR 63:020*
70	Internal Combustion Engine	Building 215	C-067 Hobart Mega-arc 200-G Welder, Gasoline, 4.0 hp	None
71	Internal Combustion Engine	Limited Area	CA351 RTAP #1, Gasoline, 9.4 hp	None
72	Internal Combustion Engine	Limited Area	CA354, RTAP #2, Gasoline, 9.4 hp	None
73	Internal Combustion Engine	Limited Area	CA356, RTAP #1, Onan 7HGJA-2132B, Gasoline, 9.4 hp	None
74	Internal Combustion Engine	Limited Area	CA356, RTAP #2 Kohler Confidant 7000, Gasoline, 9.4 hp	None

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ID	Source Type	Source Location	Description &	Generally
	Source Type		Rated Capacity	Applicable
				Regulation
75	Internal Combustion	Limited Area	CA357, RTAP #1 Kohler	None
	Engine		Confidant 7000,	
			Gasoline, 9.4 hp	
76	Internal Combustion	Limited Area	CA350, RTAP #1, Onan	None
	Engine		Marquis 7000, Gasoline, 9.1 hp	
77	Internal Combustion	Limited Area	CA350, RTAP #2, Onan	None
, ,	Engine	Emiliou Fireu	Marquis 7000, Gasoline,	Trone
			9.1 hp	
78	Internal Combustion	Limited Area	CA351, RTAP #2, Onan	None
	Engine		Marquis 7000, Gasoline,	
79	Internal Combustion	Limited Area	9.1 hp CA353, RTAP #1, Onan	None
19	Engine Engine	Lillineu Alea	Marquis 7000, Gasoline,	None
	Zingine		9.1 hp	
80	Internal Combustion	Limited Area	CA353, RTAP #2, Onan	None
	Engine		Marquis 7000, Gasoline,	
0.1	10 1	7	9.1 hp	NY
81	Internal Combustion	Limited Area	CA354, RTAP #1, Onan CMM 7000, Gasoline,	None
	Engine		9.1 hp	
82	Internal Combustion	Limited Area	CA357, RTAP #2, Onan	None
	Engine		Marquis 7000, Gasoline,	
			9.1 hp	
83	Internal Combustion	Limited Area	CA352, RTAP, Gasoline,	None
84	Engine Internal Combustion	Limited Area	9.1 hp CA352, RTAP, Onan	None
04	Engine Engine	Lillineu Alea	Marquis 7000, Gasoline,	None
	2.18.110		9.1 hp	
85	Internal Combustion	Limited Area	GX-390 Honda,	None
	Engine		Gasoline, 13 hp	
86	Process	Molten Salt Destruction	30 lb/hr TNT, 60 lb/hr	401 KAR 63:020*
87	Process	Unit TNT Wash Out facility,	Water, 220 lb/hr Salt 2,100 lb/hr Explosives,	None
07	1100035	Building 570	10,500 lb/hr Metal	TAURE
88	Waster Water	Waste Water Treatment	WWTP 0.22 mgd	None
	Treatment	Plant		
89	Lab	Building 1661 Lab	TCM Lab, no process	None
		Hoods	rate associated with this	
90	Storage Tank	Building S-10	source. 10,000 gal Diesel	None
91	Storage Tank Storage Tank	Building S-10	10,000 gal Gasoline	401 KAR 59:050**
92	Storage Tank Storage Tank	Building S-10	10,000 gal Gasoline	401 KAR 59:050**
93	Storage Tank Storage Tank	Building 219	550 gal Diesel	None
93			550 gal Diesel	None
-	Storage Tank	Building 230		
95	Storage Tank	Building 1159	10,000 gal Gasoline	401 KAR 59:050**
96	Storage Tank	Building T-250	550 gal Diesel	None
97	Storage Tank	Building T-250	550 gal Diesel	None

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ID	Source Type	Source Location	Description & Rated Capacity	Generally Applicable Regulation
98	Storage Tank	Building 1159	4,000 gal Diesel	None
99	Storage Tank	Building 550	550 gal Diesel	None
100	Storage Tank	Building S-28C	550 gal Gasoline	None
101	Storage Tank	Building 848 (LP-1)	550 gal Fuel Oil #2	None
102	Storage Tank	Building 270	550 gal Fuel Oil #2	None
103	Storage Tank	Building 252	1,000 gal Fuel Oil	None
104	Storage Tank	Building 275	10,000 gal Fuel Oil	None
105	Degreaser	Building 232	Paint Gun Degreaser, Emission Point P09	401 KAR 63:020*
106	Degreaser	Building S-9	Degreaser, Emission Point P10	None
107	Degreaser	Building S-11	Degreaser, Emission Point P11	None
108	Degreaser	Building 254	Degreaser, Emission Point P12	None
109	Wood Shop	Building S-13	Saws, Planers, Sanders, Emission Point P07	401 KAR 59:010
110	Box & Crate Woodworking	Building LP-92	Saws, Planers, Sanders, Emission Point P08	401 KAR 59:010
111	Wood Shop	Building S-17	Saws, Planers, Sanders, Emission Point P13	401 KAR 59:010
112	Internal Combustion Engine	North Area Pump Station	Catepillar G3406NA – 201 hp, Nat. Gas Emg. Gen.	None
113	Internal Combustion Engine	Route 12 Pump Station	Catepillar G30F3 – 40 hp, Nat. Gas Emg. Gen.	None
114	Internal Combustion Engine	Route 12 Pump Station	Catepillar G30F3 – 40 hp Nat. Gas Emg. Gen.	None
115	Internal Combustion Engine	Building 218	Olympian G100F1 – 134 hp Nat. Gas Emg. Gen.	None
116	Internal Combustion Engine	Building 154	Olympian G100F1 – 134 hp Nat. Gas Emg. Gen.	None
117	Internal Combustion Engine	Building S-18	Olympian G100F3 – 134 hp Nat. Gas Emg. Gen.	None
118	Internal Combustion Engine	Truck Gate	Olympian G60F1 – 80.5 hp Nat. Gas Emg. Gen.	None
119	Internal Combustion Engine	Treaty [Bldg. S-56]	Olympian G100F3 – 134 hp Nat. Gas Emg. Gen.	None
120	Internal Combustion Engine	Mobile Operation Trailer	Olympian G10U3S = 13.4 hp Propane. Gas Emg. Gen.	None
121	TNT Recovery Lab- Scale Test Unit	Building 850	No process rate associated with this source	401 KAR 63:020*
122	Shot Blast Unit	Building 232	Emission Point P05 equipped with two (2) bag filter collectors	401 KAR 59:010

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ID	Source Type	Source Location	Description & Rated Capacity	Generally Applicable Regulation
123	Manual Grinding	Building 1180	Lamson Corporation,	401 KAR 59:010
	Operations with		Exidust, SN 57846, 2500	
	Cyclone Separator		CFM	

<sup>\*</sup>See Section D.7. and Section D, Compliance Demonstration Method (F).

<sup>\*\*401</sup> KAR 59:050§ 3(2) – Each storage vessel shall be equipped with a submerged fill pipe.

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

- 1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, § 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
- 2. Source wide emission limitations for VOC, HAP, CO and NO<sub>X</sub> shall apply to the specified emission sources listed in Section B and C of this permit and the specified emission sources that will be listed in Section B and C of the forthcoming Blue Grass Army Depot Chemical Agent Destruction Pilot Plant Title V permit.
- 3. VOC emissions shall not exceed 90 tons during any consecutive twelve (12) month period. Monthly records to demonstrate compliance with this limitation shall be maintained and total VOC emissions shall be reported on a semi-annual basis. VOC emissions shall be calculated and recorded on a *monthly* basis. These records shall be summarized in tons per month of VOC emissions; subsequently, tons of VOC emissions per rolling 12-month period shall be recorded. In addition, these records shall demonstrate compliance with the VOC emission limitations listed herein for the conditional major limitations. These records shall be maintained on site for a period of five years from the date the data was collected and shall be provided to the Division upon request.
- 4. The emissions of any individual Hazardous Air Pollutant (HAP) shall not exceed nine (9) tons during any consecutive twelve (12) month period. The emissions of combined HAP shall not exceed twenty-two and one-half (22.5) tons per year. Monthly records, which demonstrate compliance with this limitation, shall be maintained and total HAP emissions shall be reported on a semi-annual basis. HAP emissions shall be calculated and recorded on a *monthly* basis. These records shall be summarized in tons per month HAP emissions; subsequently, tons of HAP emissions per rolling 12-month period shall be recorded. In addition, these records shall demonstrate compliance with HAP emission limitations listed herein for the conditional major limitations. These records, as well as purchase orders and invoices for all HAP containing materials, shall be maintained on site for a period of five years from the date the data was collected and shall be provided to the Division upon request.
- 5. CO emissions shall not exceed 225 tons during any consecutive twelve (12) month period. Monthly records to demonstrate compliance with this limitation shall be maintained and total CO emissions shall be reported on a semi-annual basis. CO emissions shall be calculated and recorded on a *monthly* basis. These records shall be summarized in tons per month of CO emissions; subsequently, tons of CO emissions per rolling 12-month period shall be recorded. In addition, these records shall demonstrate compliance with the CO emission limitations listed herein for the synthetic minor limitations. These records shall be maintained on site for a period of five years from the date the data was collected and shall be provided to the Division upon request.

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

- 6. NO<sub>X</sub> emissions shall not exceed 225 tons during any consecutive twelve (12) month period. Monthly records to demonstrate compliance with this limitation shall be maintained and total NO<sub>X</sub> emissions shall be reported on a semi-annual basis. NO<sub>X</sub> emissions shall be calculated and recorded on a *monthly* basis. These records shall be summarized in tons per month of NO<sub>X</sub> emissions; subsequently, tons of NO<sub>X</sub> emissions per rolling 12-month period shall be recorded. In addition, these records shall demonstrate compliance with the NO<sub>X</sub> emission limitations listed herein for the synthetic minor limitations. These records shall be maintained on site for a period of five years from the date the data was collected and shall be provided to the Division upon request.
- 7. As required by 401 KAR 63:020, § 3, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the Cabinet.
- 8. Where there is weekly monitoring and record keeping requirements in this permit, the monitoring and record keeping shall be required if the emission unit operated any day or portion of a day during the week. Where there is daily monitoring and record keeping requirements in this permit, the monitoring and record keeping shall be required if the emission unit operated any portion of the day.

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

#### **Compliance Demonstration Method:**

#### (A) For VOC:

VOC emitted (lbs/month) =  $\sum$  [VOC emissions from paint and cleaning solvents]

 $E_{VOC} = \sum [Q*C_{VOC}]$ 

#### Where:

E<sub>VOC</sub> = Total VOC emissions (lb/month)

Q = Usage rate of material (gal/month)

 $C_{VOC} = VOC$  content of material (lb/gal)

VOC content of material ( $C_{VOC}$ ) is obtained from the manufacturer's technical specification sheet.

VOC emitted from natural gas combustion (boilers):

(1) VOC emitted (lbs/month) = (5.5 lb/MMSCF) x (MMSCF natural gas burned/month)

VOC emitted from natural gas combustion (heaters):

(2) VOC emitted (lbs/month) = (5.3 lb/MMSCF) x (MMSCF natural gas burned/month)

VOC emitted from natural gas combustion (internal combustion engines):

(3) VOC emitted (lbs/month) = Usage (MMSCF/HR) x (HRs/month) x (116 lb/MMSCF)

VOC emitted from Diesel fuel combustion (internal combustion engines):

(4) VOC emitted (lbs/month) =  $(49.3 \text{ lb/}10^3) \times (10^3 \text{ gallons of Diesel burned/month})$ 

VOC emitted from gasoline fuel combustion (internal combustion engines):

(5) VOC emitted (lbs/month) =  $(382 \text{ lb/}10^3) \times (10^3 \text{ gallons of gasoline burned/month})$ 

VOC emitted from the Multiple Chamber Incinerator:

(6) VOC emitted (lbs/month) = (3 lb/ton of refuse) x (tons of refuse burned/month)

VOC emitted from the Contaminated Waste Processor:

(7) VOC emitted (lbs/month) = (15 lb/ton of waste ammunition material) x (tons waste ammunition material burned/month)

VOC emitted from the Detonation Chamber:

(8) VOC emitted (lbs/month) =  $(1.28 \times 10^{-4} \text{ lb/lb Net Explosive Weight (NEW)}) \times (\text{tons NEW burned/month})$ 

Source-wide VOC emissions =  $\sum$  [VOC emissions from paint and cleaning solvents] +  $\sum$  [VOC emissions from natural gas combustion] +  $\sum$  [VOC emissions from Diesel fuel combustion] +  $\sum$  [VOC emissions gasoline fuel combustion] +  $\sum$  [VOC emissions from the Multiple Chamber Incinerator] +  $\sum$  [VOC emissions from the Contaminated Waste Processor] +  $\sum$  [VOC emissions from the Detonation Chamber].

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

#### **Compliance Demonstration Method** (Continued):

Note: For the purposes of compliance with the source wide VOC emissions limit, it may be assumed that actual emissions = potential emissions for Insignificant Activities listed in Section C. Potential emissions from Insignificant Activities 24 – 85 and 112 – 120, shall be calculated assuming a maximum of 500 hours per year of operation. Potential emissions from all other Insignificant Activities shall be calculated assuming a maximum of 8,760 hours per year of operation. In equations 3, 4, and 5 the VOC emission factors for internal combustion engines have been assumed to equal the Total Organic Compounds (TOC) emission factors. Emission factors in equations 1 – 5 are referenced from EPA's Factor Information Retrieval (FIRE) Data System, Source Classification Codes (SCCs), 1-03-006-03, 1-05-001-06, 2-03-002-01, 2-03-001-01 and 2-03-003-01. Emission Factors in equations 6 – 8 are referenced from test data.

#### (B) For volatile HAP

HAP emitted (lbs/month) =  $\sum$  [HAP emissions from paint and cleaning solvents]

$$E_{HAPi} = Q * d * \frac{wt\%_{\mathit{HAPi}}}{100}$$

Where:

E<sub>HAPi</sub> = Emissions of HAP "i" (lb/month)

Q = Material usage rate (gal/month)

d = Density of the material used (lb/gal)

wt%<sub>HAPi</sub> = Weight percent of HAP "i" in material (%)

The density (d) and the weight percent of HAP "i" (wt%<sub>HAPi</sub>) is obtained from the manufacturer's technical specification sheet. The weight percent of HAP "i" should consider any solvent or other material added to the coating.

#### (C) For nonvolatile HAP

HAP emitted (lbs/month) =  $\sum$  [HAP emissions from painting operations]

$$E_{HAP} = \sum \ [Q*C_{HAP}*(1-T.E./100)*(1-C.E./100)]$$

Where:

 $E_{HAP} = HAP$  emissions (lb/month)

Q = Usage rate of material (gal/month)

 $C_{HAP} = HAP$  content of material (lb/gal)

T.E. = Transfer efficiency of the application equipment (%)

C.E. = Control efficiency of the PM/PM<sub>10</sub> abatement equipment (%)

Where:

The HAP content of the material ( $C_{HAP}$ ) shall be determined from the manufacturer's technical specification sheet. The transfer efficiency for a particular product and application technique can be obtained from the application equipment manufacturer or from technical references such as AP-42 (EPA, 1995a).

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## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

#### **Compliance Demonstration Method:**

(D) For CO:

CO emitted from natural gas combustion (boilers):

(1) CO emitted (lbs/month) = (84.0 lb/MMSCF) x (MMSCF natural gas burned/month)

CO emitted from natural gas combustion (heaters):

(2) CO emitted (lbs/month) = (20.0 lb/MMSCF) x (MMSCF natural gas burned/month)

CO emitted from natural gas combustion (internal combustion engines):

(3) CO emitted (lbs/month) = Usage (MMSCF/HR) x (HRs/month) x (399.0 lb/MMSCF)

CO emitted from Diesel fuel combustion (internal combustion engines):

(4) CO emitted (lbs/month) =  $(130.0 \text{ lb/}10^3) \times (10^3 \text{ gallons of Diesel burned/month})$ 

CO emitted from gasoline fuel combustion (internal combustion engines):

(5) CO emitted (lbs/month) =  $(7900.0 \text{ lb/}10^3) \times (10^3 \text{ gallons of gasoline burned/month})$ 

CO emitted from the Multiple Chamber Incinerator:

(6) CO emitted (lbs/month) =  $(10 \text{ lb/ton of refuse}) \times (\text{tons of refuse burned/month})$ 

CO emitted from the Contaminated Waste Processor:

(7) CO emitted (lbs/month) = (20 lb/ton of waste ammunition material) x (tons waste ammunition material burned/month)

CO emitted from the Detonation Chamber:

(8) CO emitted (lbs/month) =  $(6.58 \times 10^{-2} \text{ lb/lb Net Explosive Weight (NEW)}) \times (\text{tons NEW burned/month})$ 

Source-wide CO emissions =  $\sum$  [CO emissions from natural gas combustion] +  $\sum$  [CO emissions from Diesel fuel combustion] +  $\sum$  [CO emissions gasoline fuel combustion] +  $\sum$  [CO emissions from the Multiple Chamber Incinerator] +  $\sum$  [CO emissions from the Contaminated Waste Processor] +  $\sum$  [CO emissions from the Detonation Chamber].

Note: For the purposes of compliance with the source wide CO emissions limit, it may be assumed that actual emissions = potential emissions for Insignificant Activities listed in Section C. Potential emissions from Insignificant Activities 24-85 and 112-120, shall be calculated assuming a maximum of 500 hours per year of operation. Potential emissions from all other Insignificant Activities shall be calculated assuming a maximum of 8,760 hours per year of operation. Emission factors in equations 1-5 are referenced from EPA's Factor Information Retrieval (FIRE) Data System, Source Classification Codes (SCCs), 1-03-006-03, 1-05-001-06, 2-03-002-01, 2-03-001-01 and 2-03-003-01. Emission Factors in equations 6-8 are referenced from test data.

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

#### **Compliance Demonstration Method:**

(E) For  $NO_X$ :

NO<sub>X</sub> emitted from natural gas combustion (boilers):

(1)  $NO_X$  emitted (lbs/month) = (100.0 lb/MMSCF) x (MMSCF natural gas burned/month)

NO<sub>X</sub> emitted from natural gas combustion (heaters):

(2)  $NO_X$  emitted (lbs/month) = (10.0 lb/MMSCF) x (MMSCF natural gas burned/month)

NO<sub>X</sub> emitted from natural gas combustion (internal combustion engines):

(3) NO<sub>x</sub> emitted (lbs/month) = Usage (MMSCF/HR) x (HRs/month) x (2840.0 lb/MMSCF)

NO<sub>x</sub> emitted from Diesel fuel combustion (internal combustion engines):

(4) NO<sub>X</sub> emitted (lbs/month) =  $(604.0 \text{ lb}/10^3) \times (10^3 \text{ gallons of Diesel burned/month})$ 

NO<sub>X</sub> emitted from gasoline fuel combustion (internal combustion engines):

(5) NO<sub>X</sub> emitted (lbs/month) =  $(205.0 \text{ lb}/10^3) \times (10^3 \text{ gallons of gasoline burned/month})$ 

NO<sub>X</sub> emitted from the Multiple Chamber Incinerator:

(6)  $NO_X$  emitted (lbs/month) = (3 lb/ton of refuse) x (tons of refuse burned/month)

NO<sub>X</sub> emitted from the Contaminated Waste Processor:

(7)  $NO_X$  emitted (lbs/month) = (6.6 lb/ton of waste ammunition material) x (tons waste ammunition material burned/month)

NO<sub>x</sub> emitted from the Detonation Chamber:

(8)  $NO_X$  emitted (lbs/month) =  $(1.36x10^{-2} lb/lb Net Explosive Weight (NEW)) x (tons NEW burned/month)$ 

Source-wide  $NO_X$  emissions =  $\sum$  [  $NO_X$  emissions from natural gas combustion] +  $\sum$  [  $NO_X$  emissions from Diesel fuel combustion] +  $\sum$  [  $NO_X$  emissions gasoline fuel combustion] +  $\sum$  [  $NO_X$  emissions from the Multiple Chamber Incinerator] +  $\sum$  [  $NO_X$  emissions from the Contaminated Waste Processor] +  $\sum$  [  $NO_X$  emissions from the Detonation Chamber].

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

#### **Compliance Demonstration Method** (Continued):

Note: For the purposes of compliance with the source wide  $NO_X$  emissions limit, it may be assumed that actual emissions = potential emissions for Insignificant Activities listed in Section C. Potential emissions from Insignificant Activities 24-85 and 112-120, shall be calculated assuming a maximum of 500 hours per year of operation. Potential emissions from all other Insignificant Activities shall be calculated assuming a maximum of 8,760 hours per year of operation. Emission factors in equations 1-5 are referenced from EPA's Factor Information Retrieval (FIRE) Data System, Source Classification Codes (SCCs), 1-03-006-03, 1-05-001-06, 2-03-002-01, 2-03-001-01 and 2-03-003-01. Emission Factors in equations 6-8 are referenced from test data.

#### (F) Potentially hazardous matter or toxic substances

An air dispersion model protocol for potentially hazardous matter and toxic substance emissions (air toxics) for sources listed in Section B and Section C of this permit shall be submitted within 60 days of the issuance of this permit. Upon approval of the protocol, the source shall model the air toxics emissions as indicated in the protocol. The source shall submit the results of the air modeling to the Division, whereupon the emissions of toxics shall be evaluated to determine the compliance status with 401 KAR 63:020.

The compliance determination is based on the potential to emit emission rates of toxics (e.g., chromium) given in the application submitted by the source. If additional HAPs are identified that were not present in the application, the potential to emit emission rates of those HAPs shall also be included in the air dispersion model.

If the source alters process rates, material formulations, or any other factor that will result in an increase of emissions or the addition of toxic emissions not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020, along with modeling to show that the facility will remain in compliance with 401 KAR 63:020.

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### **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

1. Pursuant to 401 KAR 50:055, § 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

2. Pursuant to 401 KAR 50:055, § 3(1) Any affected facility commencing operations after a shutdown for six (6) months shall demonstrate compliance with the applicable standard(s) within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after commencing operations.

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# SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

- 1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, § 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, § 26].
- 3. In accordance with the requirements of 401 KAR 52:020 § 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit:
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, § 26].

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# SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- 6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 § 23. All deviations from permit requirements shall be clearly identified in the reports.
- 7. In accordance with the provisions of 401 KAR 50:055, § 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, § 26].
- 9. Pursuant to 401 KAR 52:020, Permits, § 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition:
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

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# SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Frankfort Regional Office 643 Teton Trail, STE B Frankfort, KY 40601-1758 U.S. EPA Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

- 10. In accordance with 401 KAR 52:020, § 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
- 11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, § 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

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#### **SECTION G - GENERAL PROVISIONS**

#### (a) <u>General Compliance Requirements</u>

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, §26].
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, § 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, § 12;
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- 4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, § 26].
- 5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, § 7(1)].

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#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, § 26].

- 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, § 26].
- 8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, § 26].
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, §3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, § 26].
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, § 11(3)(b)].
- 11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, § 26].
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, § 11(3)(d)].
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, § 11(3)(a)].
- 15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

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#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

16. Pursuant to 401 KAR 52:020, § 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:

a. Applicable requirements that are included and specifically identified in the permit and

- b. Non-applicable requirements expressly identified in this permit.
- 17. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, § 1.(1), at least one month prior to the date of a required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, § 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.
- (b) <u>Permit Expiration and Reapplication Requirements</u>
- 1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, § 12].
- 2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 § 8(2)].

#### (c) <u>Permit Revisions</u>

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, § 14(2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

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#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

(d) <u>Construction, Start-Up, and Initial Compliance Demonstration Requirements</u> EU12 (K02) EU15 (K05)

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points EU12, EU14, EU15 in accordance with the terms and conditions of this permit.

- 1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- 2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
  - a. The date when construction commenced.
  - b. The date of start-up of the affected facilities listed in this permit.
  - c. The date when the maximum production rate specified in the permit application was achieved.
- 3. Pursuant to 401 KAR 52:020, § 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- 4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.

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#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements.

6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

### (e) <u>Acid Rain Program Requirements</u>

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

#### (f) <u>Emergency Provisions</u>

- 1. Pursuant to 401 KAR 52:020 § 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
  - e. This requirement does not relieve the source of other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, §24(3)].
- 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, § 24(2)].

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### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

#### (g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, MD, 20703-1515

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

### (h) Ozone depleting substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
  - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

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### SECTION H - ALTERNATE OPERATING SCENARIOS

NA

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### **SECTION I - COMPLIANCE SCHEDULE**

An air dispersion model protocol for potentially hazardous matter and toxic substance emissions (air toxics) for sources listed in Section B and Section C of this permit shall be submitted within 60 days of the issuance of this permit.